

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Amendment of Sections 95.29(f)(1),)
95.119(a)(1), 95.183(a)(4), 95.63(a), (e),) RM-10762
and (f), 95.633(a) and 95.181 To Authorize)
Manufacture, Sale and Use of GPS)
Transmission Enhanced General Mobile)
Radio Service (GMRS) Units)

COMMENTS TO A
PETITION FOR RULEMAKING

Filed by: Personal Radio Steering Group, Inc.
PO Box 2851
Ann Arbor, Michigan 48106
(734) 662-4533
E-mail: prsg@provide.net

Date: September 5, 2003

=====

TABLE OF CONTENTS

	Paragraph No.
I. Background of the Commenter.	1
II. Intent of the Petition.	3
III. The Garmin Petition Fails to Recognize Certain Basic Differences Between GMRS and FRS Operations and Operators.	4
III.A. Garmin is Confused About What Is and What Is Not a GMRS "Repeater Frequency."	5
III.B. GMRS is a Licensed Service Requiring Periodic Identification by FCC Callsign.	7
III.C. FCC Sharing Requirements Effectively Require Both Pre- and During-Transmission Monitoring.	9
III.D. GMRS is Not "Citizens Band Radio."	11
III.E. The GMRS User Community Includes Many Large Groups Using the Same Operating Frequencies and CTCSS and DCS Codes.	12
III.F. FCC Rules Do Not Prohibit Attachment of External	

Devices to GMRS Transmitters.	15
III.G. The GMRS Rules Have Gone Through Numerous Changes in Recent Years.	18
IV. Automatic Polling Should Not Be Permitted Without a Requirement for Pre-Transmission Monitoring and Other Restrictions.	20
V. Service List.	91

=====

I. BACKGROUND OF THE COMMENTER.

1. The Personal Radio Steering Group, Inc. (PRSG) is an all-volunteer, not-for-profit Michigan corporation established in 1980 by licensees in the General Mobile Radio Service (GMRS, FCC Part 95-A) to provide services to and to serve as an advocate for users of the FCC's personal radio services.

2. The PRSG has published more than 300 different guides to GMRS licensing, technology and operating practices in the various personal radio services. PRSG's flagship publication, the GMRS NATIONAL REPEATER GUIDE, lists the more than 3,500 GMRS repeaters, their sponsors, technical characteristics and detailed coverage information. The GUIDE has become the essential reference to this cooperative, nonprofit communications network for licensed private individuals. PRSG also works closely with major land mobile equipment manufacturers to disseminate instructional materials for radio purchasers.

II. INTENT OF THE PETITION.

3. Garmin seeks authorization to permit data transmission of geo-location information and short text messaging on GMRS frequencies in the 462 MHz band. Currently, FCC Rules permit only voice communications in GMRS. The changes which Garmin is requesting would bring to GMRS the kind of non-voice data communications now authorized in FRS (Family Radio Service), which also shares seven specific 462 MHz frequencies with GMRS.

III. THE GARMIN PETITION FAILS TO RECOGNIZE CERTAIN BASIC DIFFERENCES BETWEEN GMRS AND FRS OPERATIONS AND OPERATORS.

4. At numerous points in the PETITION, Garmin reveals certain basic misunderstandings about GMRS, including recurrent, mistaken reference to this service as "CMRS."

III.A. GARMIN IS CONFUSED ABOUT WHAT IS AND WHAT IS NOT A GMRS "REPEATER FREQUENCY."

5. At footnote 6, Garmin states: "Garmin's proposal applies only to operations on the 462 MHz non-repeater frequencies." This is INCORRECT. The frequencies authorized to GMRS in 47 CFR 95.29(a) are precisely the same frequencies on which GMRS repeaters transmit. There WILL be interference caused to the reception of repeater transmissions on the eight GMRS frequencies identified in that rule part. This interference may come from lower-power units, but even those units can and will cause interference to the reception of repeater transmissions if those lower-power transmitters are somewhat closer to the recipient than the repeater transmitter itself. Garmin again exhibits this confusion at paragraph 7.

6. PRSG opposes the transmission of geo-location and text messaging data on these repeater-output frequencies identified in 95.29(a). We do acknowledge there is a role for geo-location data transmissions on the frequencies identified in 47 CFR 95.29(f), seven low-power frequencies shared with the FRS and on which such data transmissions are now already permitted.

III.B. GMRS IS A LICENSED SERVICE REQUIRING PERIODIC IDENTIFICATION BY FCC CALLSIGN.

7. Garmin seeks a waiver of the current callsign identification requirements (47 CFR 95.119). This will strongly suggest to GMRS users that no FCC license is required when transmitting on GMRS radios, especially those configured lawfully to transmit geo-location data or text messages.

8. PRSG and the licensed GMRS user community vigorously oppose any exemption of this or any other waiver of the current callsign identification requirements. The whole concept of obtaining cooperation in the selection and use of GMRS frequencies (47 CFR 95.7(a)) is contingent on being able to identify other users with whose communications interference may be caused or suffered. Concealing their identity by failing to identify by FCC-assigned callsign is unacceptable. Requiring FCC callsign identification is more important than keeping the total transmission time to under one second.

III.C. FCC SHARING REQUIREMENTS EFFECTIVE REQUIRE BOTH PRE- AND DURING-TRANSMISSION MONITORING.

9. The current requirements for channel selection and sharing (47 CFR 95.7) effectively require that each GMRS station operator monitor the frequency before transmitting, and (in order to know when to yield to emergency communications, required by 47 CFR 95.143) between transmissions in the communications exchange. Garmin's request for a rules change here is entirely UNACCEPTABLE to licensed GMRS users. Garmin itself recognized (PETITION at page 2, unnumbered paragraph, and later at paragraph 4) that GMRS signals are capable of traveling further than FRS signals, thus covering a larger area and potentially interfering with more co-channel users.

10. Even though the period of possible interference may be brief (one second), that is still sufficient time to interfere with the reception of

information crucial to determining the nature and location of an emergency threatening the safety of life or the protection of property.

III.D. GMRS IS NOT "CITIZENS BAND RADIO."

11. GMRS, formerly known as "Class A of the Citizens Radio Service," is NOT NOW nor has it ever been "Citizens Band Radio," as Garmin states in its PETITION at paragraph 5. Parties who allege this association with Citizens Band Radio do so either out of ignorance of GMRS' history, or in an attempt to associate incorrectly GMRS with the infamous abuses of Citizens Band Radio at 27 MHz.

III.E. THE GMRS USER COMMUNITY INCLUDES MANY LARGE GROUPS USING THE SAME OPERATING FREQUENCIES AND CTCSS AND DCS CODES.

12. Many GMRS users pool their resources to purchase, install and maintain repeater stations. Many of these and other GMRS users employ CTCSS and DCS codes (subaudible signaling for selective address and remote repeater control) in order to be able to communicate with others in these larger "affinity" groups.

13. This is in contrast with typical FRS users, who select CTCSS and DCS codes in order to be able to ignore other co-channel users and attempt to achieve a mistaken degree of "privacy." (PRSG discussed the abuses of CTCSS and DCS signaling at some length in Section V.C., paragraphs 53 and following, in our "Reply to Oppositions to a Petition for Reconsideration" in WT Docket 98-182. Manufacturers of FRS equipment, including Garmin, have marketed their products in a manner that misrepresent the purpose of CTCSS/DCS signaling, which DISCOURAGES user cooperation in channel selection and sharing, and which actually INCREASES do-channel interference.)

14. Because GMRS users are more likely to share the same CTCSS/DCS codes in a given area, Garmin's proposal to use a combination of channel-selection-plus-code-selection for automatic polling in GMRS will result in needless and interference-causing multiple responses for, between and among units employing the same code but not intended to be interrogated. Any system for automatic polling on GMNRS frequencies must include some method for more uniquely identifying the specific INDIVIDUAL unit being interrogated.

III.F. FCC RULES DO NOT PROHIBIT ATTACHMENT OF EXTERNAL DEVICES TO GMRS TRANSMITTERS.

15. The availability of FRS transmitters than can engage in geo-location and brief text-messaging communications is effectively limited only to those FRS transmitters that the FCC has type-certificated for use in FRS. No such similar prohibition of attachment of external devices applies directly to transmitters type-certificated for use in GMRS.

16. Without further control, this will lead some to attach such external, data-generating devices to GMRS transceivers, devices which will not have the imbedded controls on length of transmission and length between

transmissions.

17. If the FCC proceeds to authorize any data transmissions by GMRS radios, PRSG strongly recommends that these data transmissions be authorized ONLY on GMRS transmitters within which these data-generating capabilities are integral and for which data operations the FCC has explicitly certificated.

III.G. THE GMRS RULES HAVE GONE THROUGH NUMEROUS CHANGES IN RECENT YEARS.

18. By far the most telling indication that Garmin fails to understand how GMRS differs from FRS, and the nature of changes that GMRS has gone through in recent years (including impact on GMRS technical operations), is its claim (PETITION, paragraph 5) that "the technical rules have remained largely unchanged since 1958."

19. There have been numerous and (to GMRS users) highly significant technical changes in GMRS rules since 1983, especially those implemented in FCC Docket 87-265 (effective January 1989) and Docket 98-20 (effective February 1999). Garmin simply doesn't understand "the GMRS culture."

IV. AUTOMATIC POLLING SHOULD NOT BE PERMITTED WITHOUT A REQUIREMENT FOR PRE-TRANSMISSION MONITORING AND OTHER RESTRICTIONS.

20. For reasons discussed in Section III.C. above, and further discussed below, PRSG strongly recommends that automatic, transponder-like polling should not be authorized by GMRS stations unless EACH of the following conditions is met:

- 1) The transceiver must first monitor for a brief period of time (PRSG recommends a period of not less than 3 seconds), and not commence a response to an interrogation until at least 3 seconds have elapsed during which no other signals are received on the intended transmit frequency.
- 2) The transmitter must also transmit a valid FCC callsign under which that radio is authorized to operate under a valid and appropriate GMRS license. This transmission must be recorded voice or in Morse Code, must be transmitted in accordance with station identification requirements of 47 CFR 95.119(d)(2). PRSG acknowledges that this will increase the minimum transmission time necessary just for this ID. We suggest that the data-transmitting radio be permitted an additional maximum of 2 seconds for the express and sole purpose of transmitting its callsign.
- 3) That a GMRS station initiating the interrogation request also be required to transmit its FCC callsign at the end of that request, and must also delay that transmission under conditions identified in "1)" above, unless that station is already engaged in a voice transmission.
- 4) That auto-polling be authorized only if it addresses a specific other unit using some unique identifier other than merely the combination of channel and CTCSS/DCS code.

- 5) That a transponding unit be permitted to transmit only a single geo-location data set, and not to transmit another data set until the expiration of the 30-second waiting period, EVEN it has again been interrogated by another polling-request signal.
- 6) That such data operations be permitted ONLY under the authority of a GMRS license issued to an individual person. To permit grandfathered non-personal entities to transmit such data formats or responses would be an expansion of the privileges for which their license was grandfathered. Their data communications needs should instead be provided by resources in other services for which they are eligible.

21. There are additional and intentional ramifications to the limitations above. First, these restrictions seek to place limits on data communications between GMRS transceivers and FRS transceivers on the seven frequencies which those two services share. Since FRS transceivers are now authorized similar data communications but WITHOUT these above restrictions, PRSG requests that GMRS data communications be permitted only between properly authorized GMRS radios, and NOT between GMRS and FRS radios.

22. Second, these restrictions would effectively make data transmissions secondary to voice communications. This is intentional and desirable for GMRS, since this radio service is and should remain intended primarily for voice communications.

23. The cumulative effect of these restrictions might be to discourage auto-polling, and instead encourage the radio having received an interrogation to alert its operator to the request for a data transmission. We believe that manual responses to a data request would be preferable, since it would require actual operator involvement in the response, and thus provide an increased opportunity for operator compliance with other FCC rules requiring resource sharing (previously discussed).

XI. SERVICE LIST.

24. I hereby certify that on September 6, 2003, I sent a copy of these COMMENTS by First Class US Mail to:

Larry S. Solomon
Shook, Hardy & Bacon, LLP
Suite 800
600 14th Street, NW
Washington, DC 20005

/s/

Corwin D. Moore, Jr., Administrative Coordinator
Personal Radio Steering Group, Inc.
PO Box 2851
Ann Arbor, MI 48106
E-mail: prsg@provide.net